What is claimed is:

1. A method of altering a communications signal to reduce an average-to-minimum power ratio thereof, the communications signal being formed using pulse-shaping techniques applied to instances of a pulse of a given form, the method comprising, for at least one signal component:

setting a desired signal minimum;

identifying a time instant in the vicinity of which the signal is likely to fall below the desired signal minimum;

using a mathematical model of the communications signal in a time interval said time instant, determining a minimum of the communications signal during said time interval;

determining a measure of at least one of magnitude and phase of the communications signal corresponding to the minimum of the communications signal during said time interval; and

if said minimum of the communications signal is less than a desired signal minimum:

in accordance with said one of magnitude and phase, forming a scaled corrective pulse; and

adding to the signal component the scaled corrective pulse, in timed relation to the signal, to form a modified communications signal having a reduced average-to-minimum power ratio.

2. The method of Claim 1, comprising repeating said identifying, determining, forming and adding steps to form from the modified communications signal a further modified communications signal.

3. The method of Claim 1, comprising determining a measure of both magnitude and phase of the communications signal at said approximate time instant.

4. The method of Claim 3, comprising:

calculating values of the communication signal at a small number of points near said approximate time instant; and

fitting a mathematical function to the values.

5. The method of Claim 4, wherein the communications signal is represented within a signal plane having an origin denoting a signal of zero magnitude, and determining a measure of magnitude comprises determining within the signal plane a point of intersection between said function and an intersecting line that bears a predetermined relationship to the function and that includes the origin.

6. The method of Claim 5, wherein the small number of points is two, and the mathematical function is a spanning line that spans a distance between the two points..

7. The method of Claim 6, comprising determining a value representing a straight-line distance between said points.

8. The method of Claim 7, wherein the value representing the straight- line distance value is computed using a function.

9. The method of Claim 7, wherein the value 1 is used to represent the straight-line distance value.

10. The method of Claim 7, wherein the measure of the phase of the communications signal at the approximate time instant is represented by a trigonometric function of the phase.

11. The method of Claim 10, wherein the trigonometric function is computed using said straight-line distance value.

12. The method of Claim 11, wherein the trigonometric function is approximated by:

performing multiple comparison operations; and

based on results of the comparison operations, selecting one of multiple pre-stored values.

13. The method of Claim 12, comprising deriving from said points a line segment lying within a first quadrant of the signal plane, wherein the comparison operations compare a slope of the line segment with multiple predetermined slopes.

14. The method of Claim 12, comprising deriving from said points a line segment lying within a first quadrant of the signal plane, wherein the comparison operations comprise applying successive rotations to the line segment and, after each rotation, applying a binary criterion to a location of the line segment in the complex plane.

15. A method of altering a communications signal to reduce a average- to-minimum power ratio thereof, the communications signal being represented in polar form having a magnitude component and a phase-related component, the method comprising, for at least one signal component:

setting a desired signal minimum;

identifying a time instant at which the signal falls below the desired signal minimum; and

adding to the signal component a corrective pulse, in timed relation to the signal, to formed a modified communications signal having a reduced average-to-minimum power ratio.

16. The method of Claim 15, wherein phase is the phase-related component, comprising, during a time interval in which the phase of the communications signal changes from a first value to a second value, interpolating between

actual phase values and a line extending between the first value and the second value.

17. The method of Claim 15, wherein the signal component is phase-related, comprising:

adding to the signal component two corrective pulses that together have a negligible effect on the signal component outside a limited period of time.

18. A method of altering a communications signal to reduce a average- to-minimum power ratio thereof, comprising:

performing conditioning of the communications signal in a first domain to form a modified communications signal; and

performing conditioning of the modified communications signal in a second domain to form a further modified communications signal;

wherein the first domain is one of a quadrature domain and a polar domain, and the second domain is a different one of the quadrature domain and the polar domain.

19. The method of Claim 6, wherein the intersecting line is orthogonal to the spanning line.

20. The method of Claim 6, wherein the communications signal is formed in accordance with a signal constellation in which at least two signal points are located at different distances from the origin in the complex plane, and wherein identifying a time instant in the vicinity of which the signal is likely to fall below the desired signal minimum comprises:

dividing a straight-line distance along a transition line between two constellation points into two ratioed portions based on a point of intersection of the transition line with a normal passing through the origin.